1 DATASET 100 VISUALIZATION

PART 9 (81st to 90th visual)



Muhammad Ali Syed

- ◆ Data Scientist ◆ Cloud Evangelist
- ♦ R&D ♦ BI Reporting ♦ Report Automation
- **♦** Project Management

1 dataset 100 visualizations

Can we come up with 100 visualizations from one simple dataset?

As an information design agency working with data visualization every day, we challenged ourselves to accomplish this using insightful and visually appealing visualizations.

We wanted to show the diversity and complexity of data visualization and how we can tell different stories using limited visual properties and assets.

Number of World Heritage Sites						
	Norway	Denmark	Sweden			
2004	5	4	13			
2022	8	10	15			

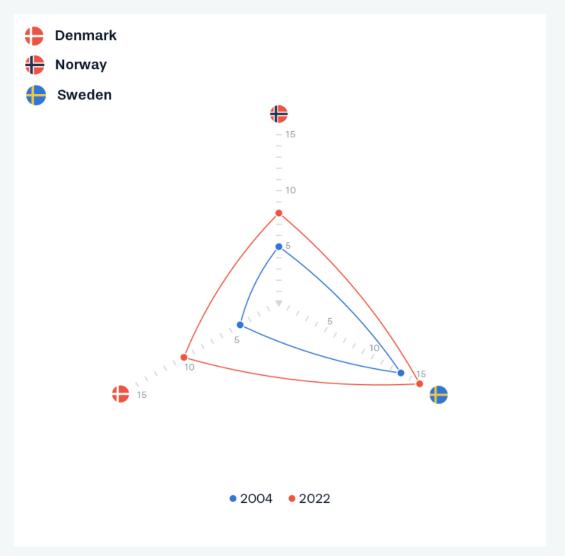
Simple yet functional

For the challenge we chose a very simple dataset — although complex enough for interpretation. The dataset includes multiple statistical aspects such as comparison, development, distribution, etc. The dataset compares the numbers of UNESCO World Heritage Sites in Scandinavia in 2004 and 2022.



From the dataset we deduced the total, average, perceptual change and perceptual distribution, which gave more possibilities for approaching the dataset from different perspectives. The story could be on the development of total Scandinavian national heritages or focus could be that Sweden has significantly more than the rest both then and now. Or the fact that in a few years Denmark surpassed Norway.

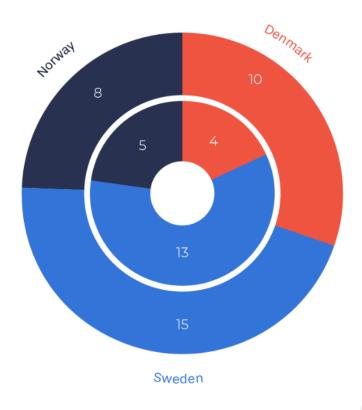
World Her	itage Sites	Additional data						
	World Heritage Sites Additional data							
Absolute —			in %					
2022	2 Change	2004	2022	Change				
8	3	22.7%	24.2%	60%				
10	6	18.2%	30,3%	150%				
15	2	59.1%	45.5%	15.4%				
33	11	100%	100%	50%				
Sou	rce: https://whc.unesc	o.org/en/list/						
	8 10 15 33	2022 Change 8 3 10 6 15 2 2 33 11	2022 Change 2004 8 3 22.7% 10 6 18.2% 15 2 59.1%	04 2022 Change 2004 2022 8 3 22.7% 24.2% 10 6 18.2% 30,3% 3 15 2 59.1% 45.5% 2 33 11 100% 100%				



The data is visualized in a radar diagram consisting of the 3 countries and the two years as variables. The visualization highlights the fact that the number of World Heritage sites grew from 2004 to 2022 for all countries.

STORIES

Scandinavia as a whole gained new sites



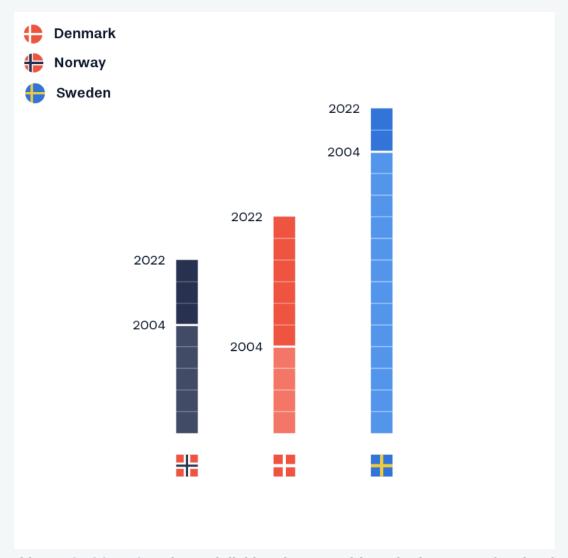
With this multi-level donut chart that aims to show the change in distribution of World Heritage sites. The inner donut is 2004 and the outer donut is 2022.

'04 '22

STORIES

Sweden stayed the country with the most sites

Sweden used to have over half of all sites and now has under half

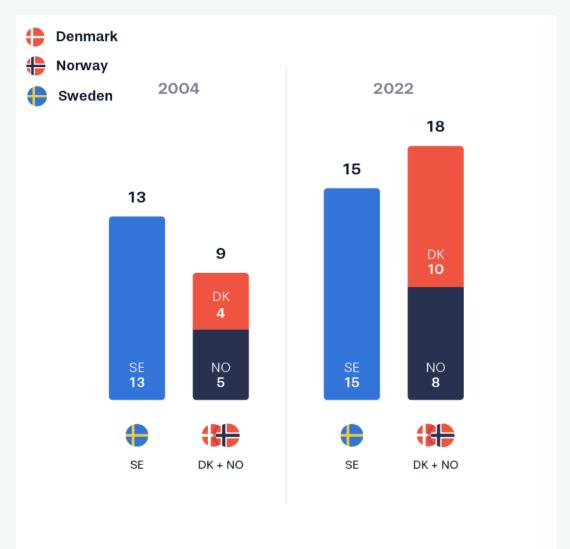


This stacked bar chart has subdividers integrated into the bars to make visual counting possible. Axis and numbers are therefore omitted for simplicity.

STORIES

Sweden stayed the country with the most sites

Denmark got most of its sites after 2004 while Sweden and Norway did before

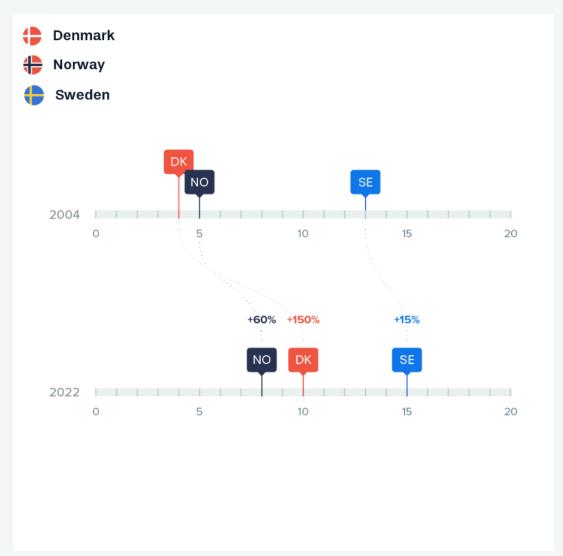


The aim of this stacked bar chart visualization is to tell the story that Sweden used to have more World Heritage sites than the other Scandinavian countries combined, but as both Norway and Denmark gained a lot since 2004, this is no longer the case.

STORIES

Sweden stayed the country with the most sites

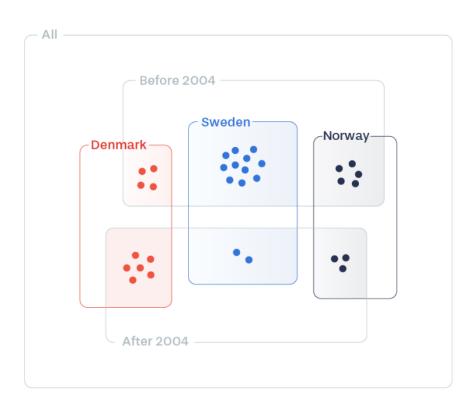
Sweden used to have over half of all sites and now has under half



On two one-dimensional axes, the country data points are plotted in and connected with a dotted line to highlight the progress.

STORIES

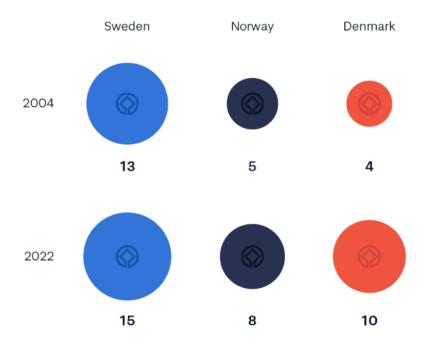
Sweden stayed the country with the most sites Denmark surpassed Norway in number of sites



In an alternative Venn diagram, all World Heritage sites are placed into groups of countries and groups of time periods. This makes it possible to read which groups each individual World Heritage site belongs to.

STORIES

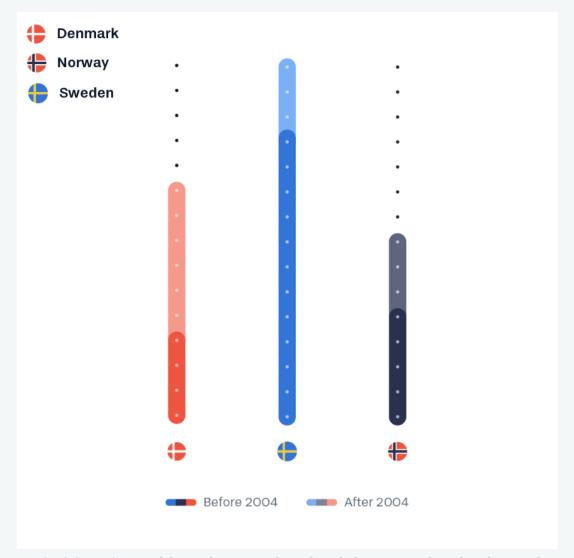
Denmark gained the most new sites and Sweden the fewest Denmark got most of its sites after 2004 while Sweden and Norway did before



A simple proportional area chart of circles put into a table structure of time and countries. The UNESCO World Heritage icon is integrated into the circles.

STORIES

Sweden stayed the country with the most sites



Stacked bar chart with an integrated scale of dots to make visual counting possible. Each dot represents a World Heritage site.

STORIES

Sweden stayed the country with the most sites

Denmark gained the most new sites and Sweden the fewest

Denmark got most of its sites after 2004 while Sweden and Norway did before



On a simple x-axis consisting of numbers only, the data points are added for both 2004 and 2022. By linking the countries to a number, the actual values are easily read.

STORIES

Sweden stayed the country with the most sites Denmark surpassed Norway in number of sites



A Marimekko chart, showing both distribution of World Heritage sites in percentages (height) and total numbers of World Heritage sites in 2004 and 2022 (width).

STORIES

Scandinavia as a whole gained new sites

Sweden stayed the country with the most sites

Sweden used to have over half of all sites and now has under half



I will share the final part tomorrow (15th March 2023)

Stay tuned...